

# Notice of Allowability

Application No.

09/820,477

Examiner

Dmitry Levitan

Applicant(s)

SANDOVAL, JESSE

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/11/05.
2. ☒ The allowed claim(s) is/are 1, 2, 4-12 and 14-22, renumbered as 1, 2, 4-10, 13, 14, 16-19, 3, 15, 11, 12, 20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**JOHN PEZZLO**  
**PRIMARY EXAMINER**

Art Unit: 2662

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Amendment, filed 05/09, has been entered. Claims 1, 2, 4-12 and 14-22 remain pending.

### **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Henry Groth on 09/22/05.

The application has been amended as follows:

Claims 1, 2, 4-12 and 14-22 have been amended as shown on Attachment A.

Note. The claims have been amended to avoid reading on Lyon (US 6,333,917) in view of Chiruvolu (US 6,839,321).

### ***Allowable Subject Matter***

Claims 1, 2, 4-12 and 14-22 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should be preferably accompany the issue fee.

Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Art Unit: 2662

*Conclusion*

The claims being allowed, **Prosecution On The Merits Is Closed** in this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is 571-272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.



Dmitry Levitan  
Patent Examiner.  
09/23/05



**JOHN PEZZLO**  
**PRIMARY EXAMINER**

## Attachment A.

1. (Currently Amended) A circuit comprising:  
a buffer for storing a plurality of data packets; and  
a test circuit configured to: (i) monitor a number of said plurality of data packets in said buffer, (ii) receive an additional data packet to said plurality of data packets, (iii) store said additional data packet into said buffer responsive to said number being less than a first threshold, (iv) discard said additional data packet in accordance with a probabilistic test responsive to said number being greater than said first threshold, and (v) presenting an identification signal to a sender of said additional data packet, indicating that said additional data packet as was discarded and can be resent.
2. (Previously Presented) The circuit according to claim 1, wherein said test circuit is further configured to always discard said additional data packet without storing said additional data packets in said buffer in response to said number being at least as great as a second threshold.
3. (Canceled)
4. (PREVIOUSLY PRESENTED) The circuit according to claim 1, wherein said test circuit is further configured to present a rate signal to said sender in a slow rate condition in response to said number being greater than said first threshold.
5. (PREVIOUSLY PRESENTED) The circuit according to claim 4, wherein said test circuit is further configured to present said rate signal to said sender in a full rate condition in response to said number being less than said first threshold.
6. (ORIGINAL) The circuit according to claim 1, wherein said probabilistic test is based upon a precedence.
7. (ORIGINAL) The circuit according to claim 1, wherein said probabilistic test is based upon a priority.

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8. (ORIGINAL) The circuit according to claim 1, wherein said probabilistic test is based upon a volume rate.

9. (ORIGINAL) The circuit according to claim 1, wherein said number is a time average of said data packets in said buffer.

10. (PREVIOUSLY PRESENTED) The circuit according to claim, 9, wherein said test circuit is further configured to (i) discard said additional data packet in response to said number being at least as great as a second threshold, (ii) present a rate signal in a first condition in response to said number being greater than said first threshold, and (iii) present said rate signal in a second condition in response to said number being less than said first threshold.

11. (CURRENTLY AMENDED) A method for managing congestion of a plurality of data packets in a buffer of a circuit, comprising the steps of:

- (A) monitoring a number of said plurality of packets in said buffer;
- (B) receiving an additional data packet to said plurality of data packets;
- (C) storing said additional data packet into said buffer

in response to said number being less than a first threshold;

(D) discarding said additional data packet in accordance with a probabilistic test without said additional data packets reaching said buffer in response to said number being greater than said first threshold; and

(E) presenting an identification signal from said circuit to a sender of said additional data packet, said identification signal indicating that said additional data packet was discarded and can be resent.

12. (PREVIOUSLY PRESENTED) The method according to claim 11, further comprising the step of: always discarding said additional data packet in response to said number being at least as great as a second threshold.

13. (CANCELED)

14. (PREVIOUSLY PRESENTED) The method according to claim 11, further comprising the step of: presenting a rate signal to said sender in a slow rate condition in response to said number being greater than said first threshold.

15. (PREVIOUSLY PRESENTED) The method according to claim 14, further comprising the step of: presenting said rate signal to said sender in a full rate condition in response to said number being less than said first threshold.

16. (PREVIOUSLY PRESENTED) The method according to claim 11, further comprising the step of: time averaging said number prior to step (C).

17. (CURRENTLY AMENDED) A circuit comprising:

- means for monitoring a number of a plurality packets in a buffer;
- means for receiving an additional data packet plurality of data packets;
- means for storing said additional data packet into

said buffer in response to said number being less than a first threshold;

means for discarding said additional data packet without storing said additional data packets in said buffer in accordance with a probabilistic test in response to said number being greater than said first threshold; and

means for presenting an identification signal from said circuit to a sender of said additional data packet, said identification signal indicating that said additional data packet was discarded and can be resent.

18. (PREVIOUSLY PRESENTED) The circuit according to claim 2, wherein said test circuit is further configured to present a r a t e signal to a sender of said additional data packets in a stop transmission condition in response to said number being greater than said second threshold.

19. (PREVIOUSLY PRESENTED) The method according to claim 12, further comprising the step of: presenting a rate signal to a sender of said additional data packets in a stop transmission condition in response to said number being greater than said second threshold.

20. (PREVIOUSLY PRESENTED) The circuit according to claim 9, wherein said number is determined before said additional data packet is permitted into said buffer.

21. (PREVIOUSLY PXESENTED) The circuit according to claim 1, further comprising a queuing management circuit disposed between said buffer and an output and configured to transfer said data from said buffer to said output.

22. (PREVIOUSLY PRESENTED) The circuit according to claim 17, further comprising means for managing presentation of said data packets from said buffer to an output.